

CLAIMS

We Claim:

1. A method for transaction management and processing in a trading environment comprising:

- providing an Order Management System for receiving Orders;
- processing Orders, by way of said Order Management System, whereby processing

Orders further comprising the steps of;

- providing Orders from an Order Management System to an Exchange; and,
- providing transaction information for Orders from an Exchange to an Order Management System; and

whereby said Order Management System comprises components selected from the group comprising; at least two cooperating services, in-memory cache, and client API.

2. A method as in claim 1 wherein the step of providing an Order Management System for receiving Orders further comprises providing said Order Management System in a distributed computing environment.

3. A method as in claim 1 wherein the step of providing an Order Management System for receiving Orders further comprises providing said Order Management System in a multi-threaded implementation.

4. A method as in claim 1 wherein said components are, at least in part, written in C++.
5. A method for order processing comprising;
- accepting an Order through a client API;
 - providing, from said client API, said Order to a Session Manager;
 - providing a session for said Order;
 - transmitting said Order from said Session Manager to an Entry Service; and,
 - attempting to Validate said Order through a Validation Service.
6. A method as in claim 5 further comprising the step of failing to Validate said Order.
7. A method as in claim 5 further comprising the steps of:
- validating said Order;
 - notifying an Entry Service through said Validation Service;
 - transmitting said Order from said Entry Service to a Transaction Service; and
 - creating an Object for said Order.
8. A method as in claim 7 wherein the step of creating an Object for said Order comprises creating an Order Object.
9. A method as in claim 7 wherein the step of creating an Object for said Order comprises creating an Execution Object.

10. A method as in claim 7 further comprising the steps of:

- transmitting said Object to a Collection Service;
- transmitting said Object to a Notification Service; and,
- transmitting said Order to a Client API.

11. The Object of Claim 7.

12. The Order Object of Claim 8.

13. The Execution Object of Claim 9.

14. A method for constructing an Order Management System comprising:

- implementing at least two cooperating services components;
- implementing an in-memory cache component, and
- implementing a client API, for use on a distributed computing platform.

15. An Order Management System comprising at least two cooperating services, an in-memory cache, and a client API, implemented on a distributed computing platform.

16. An Order Management Network comprised of at least one Order Management System.

17. A toolkit for constructing an Order Management System comprising cooperating services components, in-memory cache components, and a client API.
18. A toolkit as in claim 17, wherein said cooperating services components further comprise; a Session Manager; an Entry Service; a Validation Service; a Transaction Service; a Collection Service; and a Notification Service.
19. A toolkit as in claim 17 wherein said cooperating service components are written, at least in part, in C++.